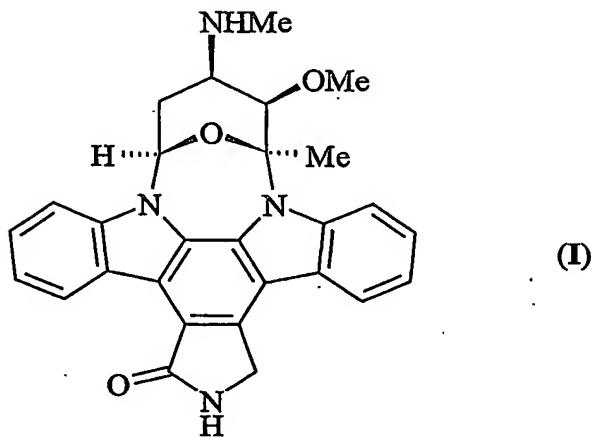


Claims

1. Process for the recovery of staurosporine of the formula



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from a fermentation broth comprising the steps of

- i) adding a water-miscible organic solvent A to the fermentation broth,
- ii) ultrafiltrating the dilute fermentation broth obtained in step i),
- iii) diafiltrating the retentate obtained in step ii) with a mixture of water and a water-miscible organic solvent B,
- iv) optionally adjusting the pH of the permeates obtained in steps ii) and iii) to at least 8.5,
- v) concentrating the permeates obtained in steps ii) and iii) until the water-miscible organic solvents A and B are almost completely removed,
- vi) adjusting the pH of the concentrate obtained in step v) to at least 8.5, unless the pH of said concentrate is already at least 8.5 and
- vii) collecting the precipitated staurosporine (I) obtained in step vi).

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2. The process of claim 1 wherein the water-miscible organic solvents A and B are identical or different and are selected from the group consisting of C₁₋₃-alcohols, *tert*-butanol, acetone and tetrahydrofuran.

3. The process of claim 2 wherein the water-miscible organic solvents A and B are identical or different and are selected from the group consisting of methanol, acetone and tetrahydrofuran.

5 4. The process of claim 3 wherein the water-miscible organic solvents A and B are identical and are tetrahydrofuran.

5. The process of one of claims 1 to 4 wherein the ratio of fermentation broth/water-miscible solvent A is between 5:1 and 0.5:1 (w/w).

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6. The process of one of claims 1 to 5 wherein the ratio of water/water-miscible organic solvent B of the mixture of water and water-miscible organic solvent B is between 5:1 and 0.5:1 (w/w).

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7. The process of one of claims 1 to 6 wherein the pH of the permeates obtained in steps ii) and iii) is adjusted to at least 8.5.

8. The process of one of claims 1 to 7 wherein the pH of the concentrate is adjusted to at least 10.0.

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9. The process of one of claims 1 to 8 wherein precipitated staurosporine (I) is collected by centrifugation.

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10. The process of one of claims 1 to 9 wherein staurosporine (I) obtained in step vii) is recrystallized from a suitable solvent system.

11. The process of claim 10 wherein the solvent system is selected from the group consisting of acetone, an acetone/water mixture and a tetrahydrofuran/methanol mixture.